

Title (en)
CONSENSUS NODE CHANGING METHOD AND RELATED APPARATUS BASED ON HONEY BADGER BYZANTINE FAULT TOLERANCE
CONSENSUS

Title (de)
KONSENSKNOTENWECHSELVERFAHREN UND ZUGEHÖRIGE VORRICHTUNG AUF BASIS VON HONEY-BADGER-BYZANTINE-FAULT-
TOLERANCE-KONSENS

Title (fr)
PROCÉDÉ DE CHANGEMENT DE NOEUD DE CONSENSUS ET APPAREIL ASSOCIÉ BASÉ SUR LE CONSENSUS DE TOLÉRANCE AUX
DÉFAILLANCES ARBITRAIRES HONEY BADGER

Publication
EP 3933640 A1 20220105 (EN)

Application
EP 21178984 A 20210611

Priority
CN 202010630142 A 20200703

Abstract (en)
Embodiments of this specification provide a consensus node changing method and apparatus based on a Honey Badger Byzantine Fault Tolerance (BFT) consensus mechanism. The method includes: when receiving a transaction for changing a blockchain's consensus node, executing, by a consensus node of the blockchain, the transaction to trigger a smart contract to update a consensus node configuration list of the blockchain, where the consensus node configuration list includes serial numbers allocated to consensus nodes based on a serial number allocation rule specified by the smart contract; associating, by the consensus node based on serial numbers of consensus nodes recorded in the updated consensus node configuration list, another consensus node of the blockchain with at least two state machines locally configured in the consensus node, where each of the state machines is configured with states corresponding to a consensus phase in the Honey Badger BFT consensus mechanism and configured to perform state switching based on a control signal to perform a consensus operation specified by the consensus phase corresponding to a current state of the state machine; and processing, by the consensus node based on the state machines that have been configured locally, a consensus proposal initiated by one or more of the other consensus nodes associated with the state machines.

IPC 8 full level
G06F 21/64 (2013.01); **H04L 9/32** (2006.01)

CPC (source: CN EP US)
G06F 11/0793 (2013.01 - CN); **G06F 16/23** (2018.12 - CN); **G06F 16/27** (2018.12 - CN); **G06F 21/64** (2013.01 - EP);
G06Q 40/04 (2013.01 - CN); **H04L 9/3239** (2013.01 - EP); **H04L 9/50** (2022.05 - EP); **H04L 63/12** (2013.01 - EP); **H04L 67/1046** (2013.01 - US);
H04L 67/1048 (2013.01 - EP US); **H04L 67/1059** (2013.01 - EP US); **H04L 67/108** (2013.01 - EP US); **H04L 67/55** (2022.05 - US);
H04L 9/50 (2022.05 - CN); **H04L 67/55** (2022.05 - EP)

Citation (search report)
• [A] CN 107579848 A 20180112 - SHANGHAI INSURANCE EXCHANGE CO LTD
• [A] CN 109309723 A 20190205 - SHANGHAI ONCHAIN INFORMATION TECH CO LTD
• [A] CN 111130879 A 20200508 - HANGZHOU QULIAN TECH CO LTD

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
US 11258851 B2 20220222; **US 2021314392 A1 20211007**; CN 111522683 A 20200811; CN 111522683 B 20201002; EP 3933640 A1 20220105;
EP 3933640 B1 20230301

DOCDB simple family (application)
US 202117352210 A 20210618; CN 202010630142 A 20200703; EP 21178984 A 20210611